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09/270,673	03/16/1999	TAKAHISA UEDA		2804

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EXAMINER

MIGGINS, MICHAEL C

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TAKAHISA UEDA
and TERUMASA YAMAMOTO

Appeal 2008-2365
Application 09/270,673
Technology Center 1700

Decided: June 30, 2008

Before CHARLES F. WARREN, CATHERINE Q. TIMM, and
MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

DECISION ON APPEAL

Applicants appeal to the Board from the decision of the Primary Examiner finally rejecting claims 22 through 33 in the Office Action mailed January 3, 2006. The Examiner subsequently refused to allow these claims as amended in the Amendment filed May 3, 2006, as entered in the Office Action mailed May 15, 2006. 35 U.S.C. §§ 6 and 134(a) (2002); 37 C.F.R.

§ 41.31(a) (2006).

We reverse the decision of the Primary Examiner.

Claim 22 illustrates Appellants' invention of an annular sliding fluoroplastic member having a composite structure, and is representative of the claims on appeal:

22. An annular sliding fluoroplastic member having a composite structure containing a plurality of layers stacked in a radial direction and coupled to one another, wherein: each layer includes fluorine plastic and short fibers; and wherein 20 or more wt. % of said short fibers by weight of a total amount of said short fibers are oriented in a direction along which the magnitude of a load is large.

The Examiner relies upon the evidence in these references (Ans. 3):

Runton	3,000,076	Sep. 19, 1961
Stiff	3,675,980	Jul. 11, 1972
Board	3,950,599	Apr. 13, 1976
Wegner	4,540,630	Sep. 10, 1985
Sumiyoshi	4,559,248	Dec. 17, 1985
Braus	4,847,135	Jul. 11, 1989
Härtel	4,942,075	Jul. 17, 1990

Appellants request review of the following grounds of rejection under 35 U.S.C. § 103(a) advanced on appeal (App. Br. 4):

claims 22, 23, 26 through 29, 33, and 43 over Braus in view of Wegner and Runton (Ans. 3);

claim 24 over Braus in view of Wegner and Runton as applied to claims 22, 23, 26 through 29, and 33 and further in view of Härtel (Ans. 6);

claim 25 over Braus in view of Wegner and Runton as applied to claims 22, 23, 26 through 29, and 33 and further in view of Stiff (Ans. 6);

claims 30 and 31 over Braus in view of Wegner and Runton as applied to claims 22, 23, 26 through 29, and 33 and further in view of Board (Ans. 7); and

claim 32 over Braus in view of Wegner and Runton as applied to claims 22, 23, 26 through 29, and 33 and further in view of Sumiyoshi (Ans. 8).

Appellants argue the claims in each ground of rejection as a group. App. Br. in entirety. Thus, we decide this appeal based on claims 22, 24, 25, 30, and 32. 37 C.F.R. § 41.37(c)(1)(vii) (2006).

The threshold issue in this appeal is whether Runton supports the Examiner's position that one of ordinary skill in this art would have found in this reference the direction to employ more than one layer of polymeric matrix material in Braus' composite material for sliding surface bearings, which issue is central to whether the Examiner has carried the burden of establishing a prima facie case in each of the grounds of rejection.

The plain language of claim 22 specifies in pertinent part an annular sliding member having at least any composite structure containing at least a plurality, that is, at least two, layers stacked in a radial direction that are coupled in any manner to one another, wherein each layer includes at least fluorine plastic and short fibers.

There is no dispute that each of Braus and Wegner disclose a single layer of a composite material including a polymeric matrix material and reinforcing short fibers on a metal substrate layer, wherein the composite material provides a sliding surface. Braus, e.g., cols. 2-5 and 7, and Figs. 1 and 7; Wegner, e.g., cols. 2-5 and Figs. 1-3. Ans. 3-5; App. Br. 5-6.

We find Runton would have disclosed to one of ordinary skill in this art, with reference to Runton Figs. 1, 3-7, 10 and 11, picker 10 having sleeve bearing 11. "Bearing sleeve 11 constitutes a molded fabric member formed by impregnating a fabric having exposed at one surface a yarn having low friction characteristics," wherein "[t]he fabric to be impregnated and molded is woven in the form of a seamless tube as shown in FIGS. 6 and 7." The

seamless tube has at least outer ply 31 composed of low friction wrap yarns 32 and filler yarns 33, and inner ply 30 composed of bondable wrap yarn 32 and filler yarn 33, which plies are bound together into a unitary structure by binder wraps 36. The wrap yarns 32 are capable of bonding to resin impregnated yarns which comprise the other yarns. Additional plies may be woven in the fabric for greater thickness. The bondable yarns engage and bond to the other yarns to hold the low friction filaments in place. The tubular fabric can be impregnated with a moldable resin and molded. The fabric is molded into the form of sleeve 11. Runton, e.g., col. 2, ll. 5-7 and 16-39, and col. 3, ll. 6-21 and 37-39.

On this record, we agree with Appellants that, contrary to the Examiner's view of Runton, the reference "lacks . . . any discussion of integrally coupled layers." Reply Br. 3; App. Br. 6; Ans. 5 and 10. Indeed, the fabric yarns are combined in a single, interconnected network resulting in one layer of fabric that is molded. Thus, as Appellants contend, Runton's molded fabric is not formed from a stack of a plurality of individual layers as illustrated in Specification Fig. 2. App. Br. 6.

Accordingly, the Examiner has not identified any teaching or suggestion in the combined teachings of Braus, Wegner, and Runton which, prima facie, would have led one of ordinary skill in this art to form the sliding surface of Braus from more than one layer of composite material. Therefore, in the absence of a prima facie case of obviousness in each instance, we reverse all of the grounds of rejection.

The Primary Examiner's decision is reversed.

Appeal 2008-2365
Application 09/270,673

REVERSED

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